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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/617,002
Filing Date: July 09, 2003
Appellant(s): SOUTHAM, BLAINE R.

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EXAMINER'S ANSWER

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This is in response to the appeal brief filed 09/15/2008 appealing from the Office action mailed 07/14/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments after Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

7) Appendix

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

8) Evidence Relied upon

2004/0078424	Yairi et al.	04-2004
2003/0212739	Boucher et al.	11-2003
2004/0093580	Carson et al.	05-2004

9) Grounds of Rejection

The ground of rejection of each claim on appeal is provided below:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1- 3, 5-6, 8, 10-12, 14, 24-25, and 27-31** are rejected under 35 U.S.C.

103(a) as being unpatentable over Yairi et al (Yairi) Pub. No. 2004/0078424 A1

in view of Boucher et al (Boucher), U.S. Pat. No. 2003/0212739 A1.

Regarding **claim 1**, Yairi teaches the invention substantially as claimed. Yairi discloses a method for collecting data regarding network service operation [*fig. 3*], the method comprising:

a client sending a message using a web protocol to a web service on the Internet [fig. 1, items 13-117; 121-125; see abstract, par. 0033; 0040; note that IM client 113 sends a message to web service 125 via proxy 103];

a network proxy intercepting a message, before it reaches the web service [par. 0010, 0033, and 0040];

a network proxy storing profiling information about the message in a database that is separate from the web service [fig. 1, web service proxy 103, database 133, and web service 121-123; par. 0040, and 0045; note that database 133 is separated from the web service and that retrieving information from the database corresponding to the message entails that the message's metadata or profiling information has already been stored in the database],

the network proxy transmitting the message to a destination web service [par. 0010, 0033, and 0040]. However, Yairi does not specifically disclose "the profiling information including the time the message was received by the network proxy".

Nonetheless this feature is well known and would have been obvious modifications to the system shown by Yairi as evidenced by Boucher.

In an analogous art, Boucher teaches a plurality proxy server that that intercepts a message from a client, store the message information in a database prior to sending the message to its web application server. Boucher teaches a client request message intercepted by a proxy, the message request is then written to a database and the proxy does not purge this message result until the request expiry time elapses" [see Boucher, par. 0155, 0157]. In order to calculate the message expiry time, the time the

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message was received is calculated and is part of this message's profiling or metadata stored.

Given this feature, a person of ordinary skill in the art would have been recognized the desirability and advantages of modifying the system of Yairi to employ the features of Boucher in order to facilitate the use of a proxy interceptor to receive messages directed to a web provider, using the time the message arrives at the proxy as part of the profiling information, thereby ensuring successful delivery of client messages [see *Boucher*; par. 0236, 0140, 161, and 0168]. By this rationale, claim 1 is rejected.

Regarding claims 2- 3, 5-6, 8, 10-12, 14, 24-25, and 27-31 the combination Yairi-Boucher teaches:

2. (Currently amended) The method of claim 1, wherein intercepting the message comprises intercepting the message sent by a developed web service that executes on the client computer [see *Yairi*; par. 0010, 0033, and 0040].

3. (Currently amended) The method of claim 1, wherein intercepting the message comprises intercepting the message using a network proxy that executes on a computer that is intermediate the client computer on which the client executes and a computer on which the web service executes [see *Yairi*; par. 0010, 0033, and 0040].

5. (Currently amended) The method of claim 1, wherein storing information about the message comprises storing information about at least one of an identity of the client computer that sent the message, an identity of the web service, a time at which the message was transmitted to the destination network service, and information about the substance of the message [see *Yairi*; par. 0040, and 0045; also see *Boucher*, par. 0155, 0157 with respect to the type of information store]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 5 is rejected.

6. (Currently amended) The method of claim 1, wherein transmitting the message to a destination web service comprises transmitting the message to an external web service on the Internet [see *Yairi*; par. 0010, 0033, and 0040; see that web services 121-123 are external web service on the Internet].

8. (Currently amended) The method of claim 1, further comprising the network proxy interjecting instrumentation information into the message prior to transmitting the message to the destination web service, the instrumentation information being useful in profiling system operation [see *Yairi*; par. 0033, and 0040].

10. (Original) The method of claim 8, wherein interjecting instrumentation information comprises adding instrumentation information to a header of the message [see

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Boucher; fig. 5, par. 0206, 0232]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 10 is rejected.

11. (Currently amended) The method of claim 8, wherein interjecting instrumentation information comprises interjecting at least one of a time the message was received, an identity of the client computer that sent the message, an identity of the destination network service, a time at which the message was transmitted to the destination network service, and information about the substance of the message [*see Yairi; par. 0040, and 0045; also see Boucher, par. 0155, 0157 with respect to the type of information store*]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 11 is rejected.

12. (Currently amended) The method of claim 11, further comprising the network proxy receiving a response from the destination network web service and storing profiling data regarding the response in the database [*see Yairi; par. 0010, and 0033*].

14. (Original) The method of claim 13, wherein storing data regarding the response comprises storing at least one of a time the response was received, an identity of the destination network service, a time that the message transmitted to the destination network service was received, and a time that the response was transmitted by the destination network service [*see Yairi; par. 0040, and 0045; also see Boucher, par.*

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0155, 0157 with respect to the type of information store]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 14 is rejected.

24. (Currently amended) A computer that stores a network proxy [see Yairi; *fig. 3*], the proxy comprising:

logic configured to intercept messages sent by a client using a web protocol and directed to a web service that executes on a separate computer on the Internet before the messages reach the web service [see Yairi; *fig. 1, items 13-117; 121-125; see abstract, par. 0033; 0040; note that IM client 113 sends a message to web service 125 via proxy 103*];

logic configured to store in a database that is separate from the web service profiling information about the message [see Yairi; *fig. 1, web service proxy 103, database 133, and web service 121-123; par. 0040, and 0045*],

the profiling information including the time the message was received by the network proxy [see Boucher, *par. 0155, 0157*]; and

logic configured to transmit the message to a destination web network service [see Yairi; *par. 0010, 0033, and 0040*]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 24 is rejected.

25. (Currently amended) The computer of claim 24, wherein the logic configured to store information about the message comprises logic configured to store information about at least one of, an identity of the client computer that sent the message, an identity of the web service, a time at which the message was transmitted to the destination network service, and information about the substance of the message [see *Yairi*; par. 0040, and 0045; also see *Boucher*, par. 0155, 0157 with respect to the type of information store]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 25 is rejected.

27. (Original) The computer of claim 24, further comprising logic configured to interject instrumentation information into the message [see *Yairi*; par. 0033, and 0040].

28. (Original) The computer of claim 27, wherein the logic configured to interject instrumentation information comprises logic configured to add instrumentation information to a header of the message [see *Boucher*; fig. 5, par. 0206, 0232]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 28 is rejected.

29. (Currently amended) The computer of claim 27, wherein the logic configured to interject instrumentation information comprises logic configured to interject at least one of a time the message was received, an identity of the client computer that sent the

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message, an identity of the web service, a time at which the message was transmitted to the destination network service, and information about the substance of the message [see *Yairi*; par. 0040, and 0045; also see *Boucher*, par. 0155, 0157 with respect to the type of information store]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 29 is rejected.

30. (Currently amended) The computer of claim 24, further comprising logic configured to receive a response from the destination web service and logic configured to store in the database profiling data regarding the response [see *Yairi*; par. 0010, and 0033].

31. (Original) The computer of claim 30, wherein the logic configured to store data regarding the response comprises logic configured to store at least one of a time the response was received, an identity of the destination network service, a time that the message transmitted to the destination network service was received, and a time that the response was transmitted by the destination network service [see *Yairi*; par. 0040, and 0045; also see *Boucher*, par. 0155, 0157 with respect to the type of information store]. The same motivation and reason to combine provided for the rejection of claim 1 are also valid for this claim. By this rationale, claim 14 is rejected.

3. **Claims 7 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yairi* and *Boucher*, further in view of *Carson et al* (*Carson*) U.S. Pub.

2004/0093580 A1.

Regarding claim 7: Although Yairi and Boucher teach substantial features of the claimed invention, Yairi and Boucher do not distinctly teach a method wherein transmitting the message to a destination web service comprises transmitting the message to a mock web service that emulates operation of the web service on the Internet. This feature is well known to an average skill in the art, and it would have been an obvious modification to the system of Yairi and Boucher as shown by Carson.

In the same field of endeavor, Carson teaches a mock web service capable of emulating and real-time external web service. Carson teaches *"Testing is typically outlined in formal test cases and defects are usually reported and tracked. MES that may require connection to remote web services to complete a task generally should have this remote interaction tested during the system test phase. This may require connection to an external web service. In certain cases, use of a live web service may incur costs to the project, and connection to a provider's test site may be desirable, if available"* [see Carson; par. 0063]. In an attempt to properly test a web services in development, a testing environment with a mock web service is needed.

Accordingly, it would have been obvious for an ordinary skill in the art, at the time the invention was made, to have incorporated the test web services of Carson into the systems of Yairi and Boucher, for the purpose of ensuring proper functionality, performance and quality as stated by Carson in the first lines of par. 0063. By this rationale, claim 7 is rejected.

Regarding claim 26: Yairi, Boucher, and Carson teach the computer of claim 24, wherein the logic configured to transmit is configured to transmit the message to one of a web service and a mock web service that emulates operation of the web service [see *Carson; par. 0063*]. The same motivation and reason to combine provided for the rejection of claim 7 are also valid for this claim. By this rationale, claim 26 is rejected.

(10) Response to Arguments

Appellant has submitted that the Examiner has not established that Appellant's claims are obvious in view of the prior art. Appellant has argued the rejections of those claims raising the following points of contention:

1- The Yairi Reference

Issue 1) Yairi discloses a method and system for accessing web services from a mobile terminal, such as a mobile phone. *Yairi*, Abstract. More particularly, Yairi describes a communications network adapted to allow mobile terminals to use a web-based instant messaging (IM) service, such as AOL Instant Messaging, MSN Messenger, and Yahoo! Messenger. *Yairi*, paragraph 0023. In Yairi's system, mobile terminals 113, 115, and 117 wirelessly communicate over a voice network 131 via base stations 129, as is conventional in the art. *Yairi*, paragraph 0023. Using the mobile terminals, IM clients can send IM messages over the voice network 131. *Yairi*, paragraph 0023. When an IM message is directed to an IM service, the message is routed through an IM server 111 to an IM web services gateway 101. *Yairi*, paragraph 0024. The gateway 101 includes a

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web services proxy module 103 and a web services broker module 105. *Yairi*, paragraph 0024. The proxy module 103 is responsible for translating messages between the format used by the mobile terminals into a web services format. *Yairi*, paragraph 0026. The web services broker module 105 provides registration and discovery for web services that can be accessed through the gateway 101. *Yairi*, paragraph 0027. The broker module 105 stores in a database 133 any data needed for the interaction between the IM client and the requested web service. *Yairi*, paragraph 0027. In view of the above, it is clear that *Yairi*'s mobile terminals do not send messages using a "web protocol". Moreover, it is noted that *Yairi* does not describe any component, including the proxy module 103 and the broker module 105, that stores in a database profiling information about a received message.

Issue 1 response) It is the position of the Examiner that *Yairi* discloses a method and system for accessing web services from a mobile terminal, such as a mobile phone. For an average skill in the art, a web protocol such as the Internet Protocol (IP) is a protocol used for communicating data across a packet-switched internetwork. IP is a network layer protocol in the Internet protocol suite and is encapsulated in a data link layer protocol (e.g., Ethernet). As a lower layer protocol, IP provides the service of *communicable* unique global addressing amongst computers. *Yairi* is clear regarding IM client sending messages over a network using web protocols. When the IM client requests to communicate with a web service the IM message is routed through a mobile IM server to an IM/WS gateway, which obtains a description of the requested web

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service, prompts the IM client for any required web service input, and composes a web services formatted message to send to the web services provider (see Yairi, abstract). In doing so, the Web client used by Yairi does not necessarily need the presence of a proxy to access a web service.

The appellant does not properly characterized the teachings of Yairi in that Appellant asserts not rightfully so, that the reason that the client in Yairi uses the broker module 105, and database 133 is that any data needed for the interaction between the IM client and the requested web service. This is done because of the reason specified in par. 0008. In this case, the mobile web client is trying to access multiple web service, and the role of the broker module and the web proxy is to negotiate which format must be used to access any of the plurality of web services. A generic mechanism is used to reduce the overhead required by a mobile device to access multiple web services than the overhead required by previous solutions (i.e., unique client-device application for each web service)."*... when an instant message is directed to a web service, as described herein, the instant message is routed through the mobile IM server 111 to an Instant Messaging Web Services (IM/WS) Gateway 101 for further processing (because of the availability of a plurality of providers to choose from, thereby avoiding overhead) and delivery to a web service provider, such as web service provider 121, 123, or 125...*" (par. 0024). "*...In addition, by allowing users to access web services using an IM client, users can use a familiar user interface for accessing multiple web services without having to learn a new user interface for each web service the user desires to access...*"(par. 0025).

In par. 0025, Yairi further confirms the Examiner's position. Yairi teaches that "...In addition, because the same IM client is used to access each web service, the user does not need to switch applications to access a new web service, *thus making the user interface simple and intuitive to use. The IM client may also support initiating a web service session either from the client (pull model) or from the IM/WS gateway 101 (push model).*

It is clear that the mobile device through the pull model is capable of access a web service using a web protocol as the web service format is specified at the client side.

Issue 2) Appellant argues that the Examiner further alleged in the final Office Action that Yairi teaches "the network proxy storing profiling information about the message in a database that is separate from the web service". For support, the Examiner identified the web service proxy 103. In response, Applicant notes that the web service proxy 103 is not described anywhere in the Yairi reference as storing "profiling information" about a message sent by a client. Instead, as described above, Yairi's web service proxy 103 merely *translates* messages from mobile phones for web services 121, 123, and 125. Applicant further notes that although Yairi identifies a database 133 in which information is stored, that database is not ever described by Yairi as storing any profiling information.

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Issue 2 response) In response to the appellant position that Yairi does not teach the network proxy storing profiling information about the message in a database that is separate from the web service, the Examiner once again disagrees. Yairi in par. 0027 teaches “...*Web service broker module 105 provides registration and discovery for web services accessed through IM/WS gateway 101, and stores in database 133 any data needed for the interaction between the end user and a requested web service. The stored data may include web service description metadata, web service composition metadata, or web service workflow logic. The stored data may additionally include program control logic, payment information, or any other information about the web service or web service provider that may be presented to the user, e.g., during web service discovery or activation. ..*”. Payment information contained in the database 133, results from individual IM messages received from IM user client that comprise profile data pertaining to individual account with specific web services. Furthermore, *the service broker 105 may be instructed by the IM client through a message request to perform specific search criteria, when locating any new and/or existing web services. these constitute profiling message data that are stored to facilitate interaction between the end user and future similar request for the same web service from the same provider (see Yairi, par. 0029, 0028).*

2-The Boucher Reference

Issue 3) Appellant contends that the Boucher reference does not disclose storing message request profiling information that comprises the time the message was

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received by the network proxy. Although Boucher identifies a store and forward proxy 12, nowhere does Boucher indicate that proxy stores "profiling information" about a received message or that the stored profiling information includes "the time the message was received". Instead,

Issue 3 response) Boucher teaches a plurality proxy server that that intercepts a message from a client, store the message information in a database prior to sending the message to its web application server. The concept of profiling information intercepted and stored was already explained in issue 2 response above and a rationale for the combination with Boucher is provided in the rejections of claim 1 above. However, The Examiner maintains his position that Boucher teaches a client request message intercepted by a proxy, the message request is then written to a database and the proxy while this message is not purged this message result until the request expiry time elapses" [see *Boucher*, par. 0155, 0157]. In order to calculate the message expiry time, the time the message was received is inherently calculated and is part of this message's profiling or metadata stored. The combination of Yairi and Boucher teaches **a client sending a Message using a web protocol** as evidenced in the rejection of claim 1 above (see Yairi, par. 0010, 0033, 0040, and 0045), and a **structure to store profiling and timing information about a received message** (see Boucher (par. 0153-0155)).

(11) Related Proceedings Appendix

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No Related Proceedings is presented for Appeal. Therefore the Appendix to the brief is correct.

Conclusion

For the above reasons, it is believed that the rejections should be sustained. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger, can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

Respectfully submitted,

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2443

June 30, 2009

/Tonia LM Dollinger/

Supervisory Patent Examiner, Art Unit 2443

March 02, 2009

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